

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/920,790	SUTHERLAND, JAMES BRYCE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Joon H. Hwang	2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 9/30/05.
2. ☒ The allowed claim(s) is/are 1,2,4-14,17,20-29,31,33,34 and 36 (renumbered as 1-28).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

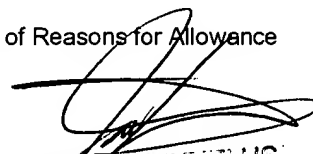
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|---|

  
 JEAN M. CONTREIRAS  
 PRIMARY EXAMINER

### DETAILED ACTION

1. The applicant amended claims 1, 4, 10, 17, 20-29, 31, 33, 34, and 36 and canceled claims 3, 15, 18, 19, 32, and 35 in the amendment received on 9/30/05.

The pending claims are 1-2, 4-14, 17, 20-29, 31, 33-34, and 36.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Edward Grundler (Reg. No. 47,615) on 12/21/05.

4. The application has been amended as follows:

In claim 1, last line, please delete "the user" and insert - - a user - -;

In claim 8, line 2, please delete "the target table information" and insert - - target table information - -;

In claim 9, line 6, please delete "the foreign key values" and insert - - foreign key values - -;

In claim 10, line 29, please delete "the user" and insert - - a user - -;

In claim 17, line 29, please delete "the user" and insert - - a user - -;

In claim 24, line 5, please delete "the source object" and insert - - a source object - -;

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In claim 24, line 29, please delete "the user" and insert - - a user - -;

In claim 31, line 1, please delete "the instructions" and insert - - instructions - -;

In claim 31, line 2, please delete "the execution" and insert - - execution - -;

In claim 31, line 28, please delete "the user" and insert - - a user - -;

In claim 33, line 21, please delete "for the many-to-many join" and insert - - from the many-to-many join - -;

In claim 33, line 30, please delete "the user" and insert - - a user - -;

In claim 34, line 1, please delete "the instructions" and insert - - instructions - -;

In claim 34, line 2, please delete "the execution" and insert - - execution - -;

In claim 34, line 6, please delete "the source object and related objects" and insert - - a source object and related objects - -;

In claim 34, line 26, please delete "the object" and insert - - the objects - -;

In claim 34, line 30, please delete "the user" and insert - - a user - -;

In claim 36, line 5, please delete "the source object and related objects" and insert - - a source object and related objects - -;

In claim 36, line 30, please delete "the user" and insert - - a user - -;

In specification, page 7, line 16, please delete "PROJECT 24" and insert - - PROJECT 64 - -; and

In specification, page 15, line 4, please delete "shown in Figure 1B," and insert - - shown in Figure 2B, - -.

***Allowable Subject Matter***

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5. Claims 1-2, 4-14, 17, 20-29, 31, 33-34, and 36 are allowed.

***Reason For Indicating Allowable Subject Matter***

6. Claims 1, 10, 17, 24, 31, 33, 34, and 36 identify the distinct features, the retrieval query is generated by obtaining a source expression tree relating to the collection of the source object, building a target expression tree defined by the many-to-many mapping including a join between the target tables and the join table, combining the source expression tree and the target expression tree to produce a combined expression tree, and generating the retrieval query based on the combined expression tree, are not taught or suggested by the prior art made of records. The closest prior art, Srinivasan (U.S. Patent No. 5,799,309) disclosing translating an object-oriented query to a relational query for retrieving data in a relational database, fails to suggest the claimed limitations as mentioned above in combination with other claimed elements. The above features in conjunction with all other limitations of the dependent and independent claims 1-2, 4-14, 17, 20-29, 31, 33-34, and 36 are hereby allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joon Hwang  
Patent Examiner  
Technology Center 2100

12/23/05

  
JEAN M. CARRIELUS  
PRIMARY EXAMINER